

FUNCTIONAL AREA 6

Data Administration (DA)

Incumbents in this functional area manage organizational data. They develop and maintain data models and data dictionaries; develop plans and policies for conforming systems and applications to the enterprise data model; set policies and standards to ensure data quality, integrity, and security; and develop business-area, process-specific, and application-specific logical data models and data dictionaries.

DATA ADMINISTRATION	Assistant Information Technology Specialist	Information Technology Specialist I	Information Technology Specialist II	Information Technology Specialist III
Knowledge of:				
Basic data administration concepts and methods	X	X	X	X
Basic data quality methods and tools	X	X	X	X
General concepts of database management systems	X	X	X	X
General concepts of application software to facilitate and control the input, transformation, and output of data	X	X	X	X
Data standardization guidelines, practices and methods		X	X	X
Meta-data concepts and practices		X	X	X
Sources, characteristics, and uses of the enterprise's data assets (i.e. meta-data)		X	X	X
Logical data modeling concepts, practices, methods, and principles including application, business process, and subject area data models		X	X	X
Data modeling software tools		X	X	X
Data modeling standards		X	X	X
Concepts and principles of data normalization		X	X	X
Methods and techniques for gathering data requirements		X	X	X
Data dictionary standards and best practices		X	X	X
Basic techniques of leading and facilitating meetings		X	X	X
Data architecture best practices and standards			X	X
Strategic and tactical IT planning			X	X
Enterprise data modeling concepts, practices, methods and principles			X	X
Meta-data repository tools			X	X
Advanced data administration concepts, methods, practices, and principles				X

Advanced data quality and integrity principles, methods, and tools				X
Advanced data modeling concepts, practices, methods, and principles				X
Facilitation, negotiation, and consensus-building techniques to foster agreement and common goals between differing groups				X
Ability to:				
Apply data naming standards	X	X	X	X
Apply data quality and integrity standards	X	X	X	X
Use meta-data repository tools	X	X	X	X
Assess the quality and integrity of data; determine deviations from data standards	X	X	X	X
Read and understand data models	X	X	X	X
Use and maintain data dictionaries	X	X	X	X
Develop and maintain meta-data		X	X	X
Categorize data by confidentiality according to federal, State and departmental laws, regulations, and policies		X	X	X
Determine sources, characteristics, owners, and uses of the organization's data assets from various business documents and application/database documentation		X	X	X
Normalize data		X	X	X
Develop and maintain logical data models (application, business process, and/or subject-area data models)		X	X	X
Facilitate groups of business decision makers and subject-matter-experts to identify similarities and differences in their definitions and usage for specific data elements		X	X	X
Develop and maintain data naming standards			X	X
Develop and maintain data quality and integrity standards			X	X
Develop and maintain data modeling standards			X	X
Assess data criticality to appropriately focus resources on enforcement of data standards.			X	X
Develop and maintain enterprise data models			X	X
Create data dictionaries			X	X
Identify emerging trends and relate them to the current and future data management environment			X	X
Evaluate, research and develop proposals for the acquisition of data administration products or services			X	X

Facilitate groups of business decision makers and subject-matter-experts to develop plans for integrating and/or normalizing specific data elements				X
Develop plans for integrating data				X
Evaluate and recommend adoption of new or enhanced approaches to data administration services				X
Play key role in formulating IT strategy and policy				X

Assistant Information Technology Specialist, (Data Administration)

Incumbents apply a basic understanding of data quality and data naming standardization. Under direct technical supervision, incumbents apply basic principles and practices in maintaining data definitions and data dictionaries, and reviewing existing systems and documents for compliance with standards. They assist more experienced staff to normalize data, develop and maintain data models.

Information Technology Specialist I, (Data Administration)

Incumbents apply a basic understanding of data quality, standardization, normalization, and modeling. Under technical supervision and guidance, incumbents maintain data dictionaries and logical data models (business process, application, and/or subject-area data models). They assist more experienced staff in the development and administration of various data administration standards related to data naming conventions, data quality and integrity, and data modeling. Incumbents facilitate small groups with no major issues or serious conflicts as they identify data definition similarities and differences.

Information Technology Specialist II, (Data Administration)

Incumbents demonstrate proficient understanding of data administration. Incumbents create effective policies and procedures to further the organization's compliance with its business process or application data models. They develop and administer various data administration standards related to data naming conventions, data quality and integrity, and data modeling. They facilitate interaction between business decision-makers and subject-matter-experts in gaining consensus on the direction of business process and application data models and the plans for integrating specific data elements.

Information Technology Specialist III, (Data Administration) RANGE A

Incumbents demonstrate advanced proficiency in data administration. Incumbents create effective policies and procedures to further the organization's compliance with its enterprise data model and enterprise architecture. They support varied business processes of varying complexity. They facilitate interaction between business decision-makers and subject-matter-experts and negotiate difficult conflicts to establish a single enterprise data model. They develop strategic and tactical data integration plans, and incorporate them into the organization's strategic and tactical plans. Incumbents typically lead a group of

data administrators in the development and maintenance of data administration standards, policies, processes, and methods.

Information Technology Specialist III, (Data Administration) RANGE B

Incumbents demonstrate the most advanced level of knowledge and experience in data administration. Incumbents support the most varied and complex business processes. They support large inter-organizational enterprise architecture, integration, or application projects. They facilitate business decision-makers and subject-matter-experts and negotiate the most difficult conflicts to establish a single enterprise data model. They develop strategic and tactical data integration plans, and incorporate them into the State's or organizations strategic and tactical plans. Incumbents typically lead a group of data administrators in the development and maintenance of data administration standards, policies, processes, and methods. They work with all levels of technical and management staff to achieve solutions for the most complex and critical projects.